LA County Location Management System

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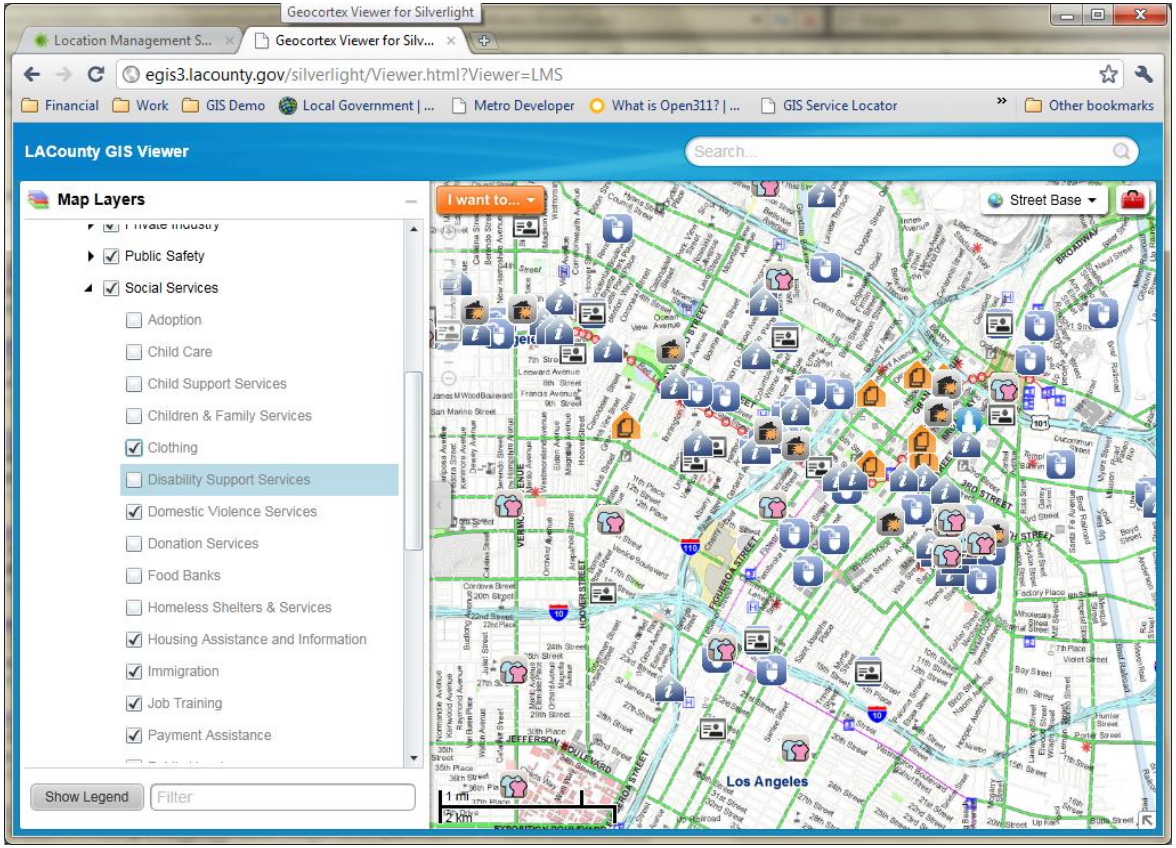
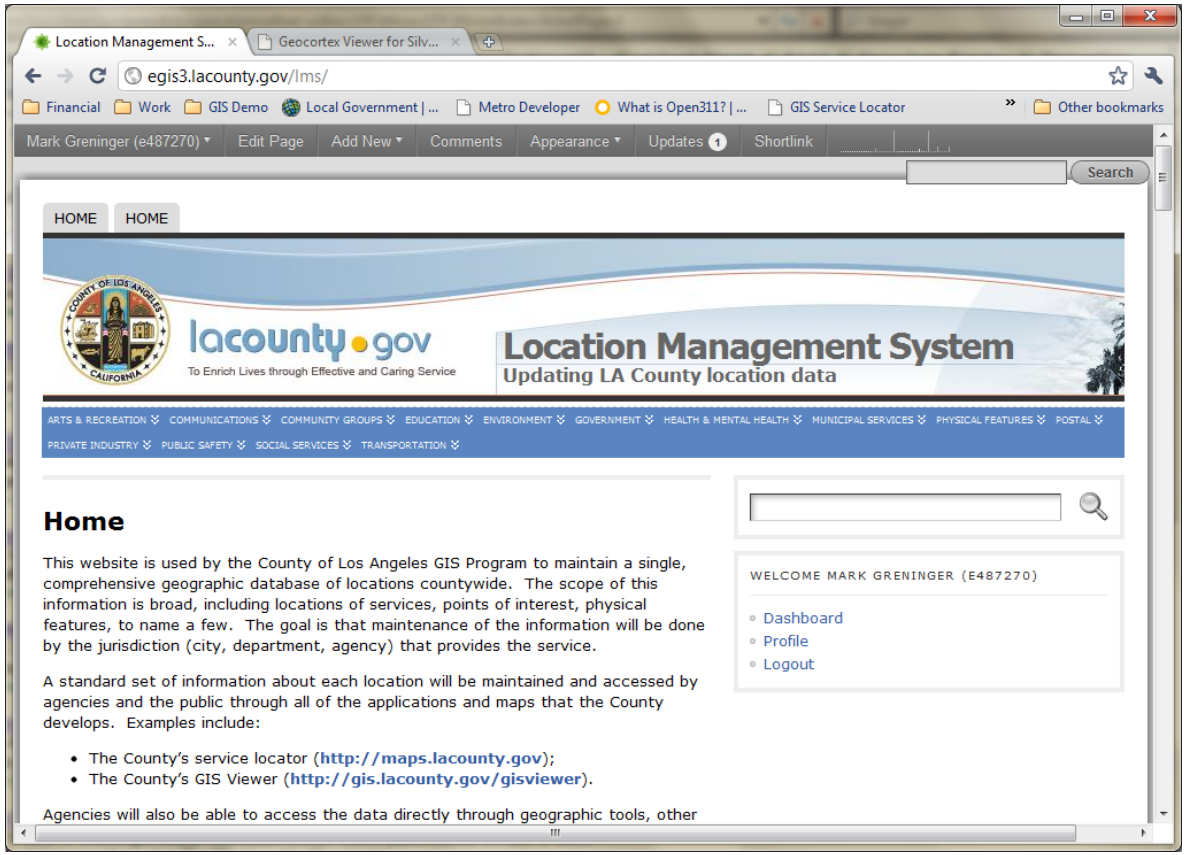
County of Los Angeles

Is this GIS?


Geocortex Viewer for Silverlight
Location Management S...
Geocortex Viewer for Silv...
egis3.lacounty.gov/silverlight/Viewer.html?Viewer=LMS
Financial
Work
GIS Demo
Local Government | ...
Metro Developer
What is Open311? | ...
GIS Service Locator
Other bookmarks
LACounty GIS Viewer
Search...
Map Layers
I want to...
Street Base
Public Safety
Social Services
Adoption
Child Care
Child Support Services
Children & Family Services
Clothing
Disability Support Services
Domestic Violence Services
Donation Services
Food Banks
Homeless Shelters & Services
Housing Assistance and Information
Immigration
Job Training
Payment Assistance
Show Legend
Filter
Los Angeles

Is this?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Mark Greninger (e487270)
Edit Page
Add New
Comments
Appearance
Updates 1
Shortlink
Search
HOME
HOME
lacounty.gov
To Enrich Lives through Effective and Caring Service
Location Management System
Updating LA County location data
ARTS & RECREATION
COMMUNICATIONS
COMMUNITY GROUPS
EDUCATION
ENVIRONMENT
GOVERNMENT
HEALTH & MENTAL HEALTH
MUNICIPAL SERVICES
PHYSICAL FEATURES
POSTAL
PRIVATE INDUSTRY
PUBLIC SAFETY
SOCIAL SERVICES
TRANSPORTATION
Home
This website is used by the County of Los Angeles GIS Program to maintain a single, comprehensive geographic database of locations countywide. The scope of this information is broad, including locations of services, points of interest, physical features, to name a few. The goal is that maintenance of the information will be done by the jurisdiction (city, department, agency) that provides the service.
A standard set of information about each location will be maintained and accessed by agencies and the public through all of the applications and maps that the County develops. Examples include:
The County's service locator (http://maps.lacounty.gov);
The County's GIS Viewer (http://gis.lacounty.gov/gisviewer).
Agencies will also be able to access the data directly through geographic tools, other
WELCOME MARK GRENINGER (E487270)
Dashboard
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What is GIS?

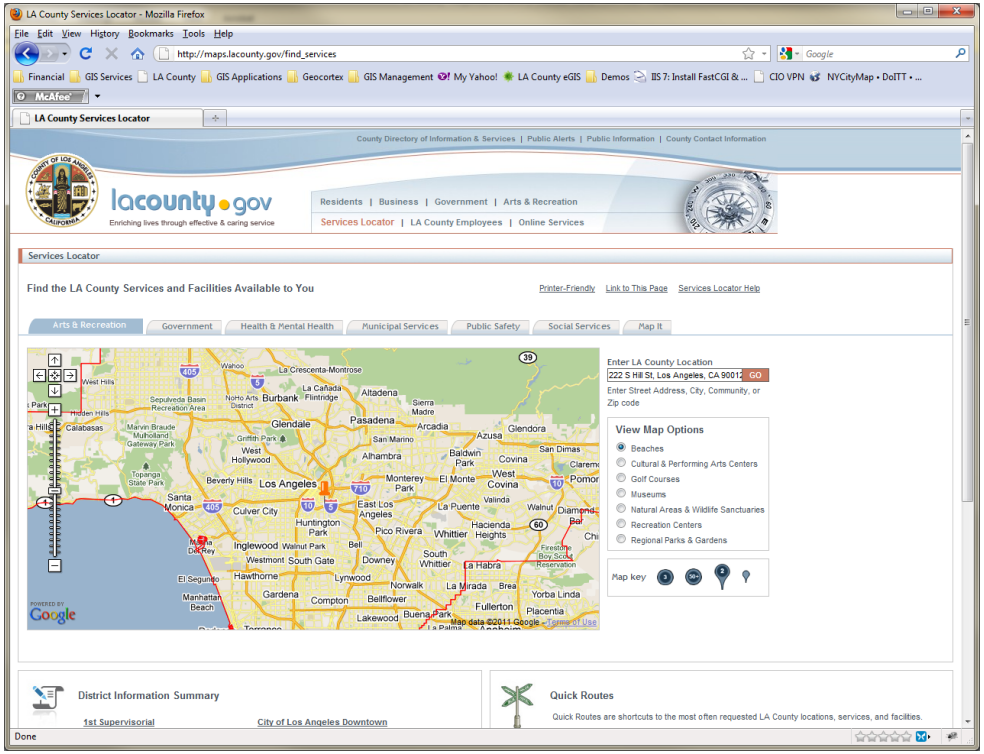
Who "owns" GIS data?

Who “owns” GIS data

- GIS specialists don’t
- Ownership is inside of business lines of government agencies.
- This complicates the maintenance of GIS data.

County Services Locator

- (http://maps.lacounty.gov) – Where citizens can find services



Data Flows

- LA County Public Information Office is the data broker.
  - Contacts over 40 departments yearly send updates about their services.
- LA County GIS team loads the data into GIS using automated loading tools.

What this means in reality

- PIO sends request to department liaison
- Liaison scrambles to find someone who knows
- That person scrambles and checks the data, sends updates to liaison
- Liaison compiles and sends to PIO (version issues)
- PIO deals with formatting issues (might send back).
- PIO compiles departmental submissions (version issues)
- PIO sends to GIS
- GIS deals with formatting issues (can't geocode, etc).
- GIS loads to system (hope it works).
- GIS sends message to PIO that "it's loaded"
- PIO sends message to liaison
- Liaison send message to data owners (maybe)
- Data owners check to make sure it's right.

13 steps – but what if the data was mis-typed or is wrong
How long does it take?

Impacts

- Massive effort
- Complicated communications
- Very brittle – errors are introduced easily
- Silod system – no way for other people to catch errors and report/fix.
- Technologic problems
- Long-term un-maintainable
- GIS staff are the single point of update

Is this the way GIS should be?

What we need

- Let the system do the work
- Update the data where it is used
- Get the GIS person out of data maintenance
  - GIS designs the system
  - Business owners take over
- Single point of entry
  - Web based
- Multi-user, multi-authority
- Multi-platform
  - GIS, Browser, phone
- Automate messaging of updates

What we need

- A system that:
  - is easy to use
  - is easy to maintain
  - doesn't need development
  - Available anytime, anywhere
  - can be used by non-GIS folks
  - handles communications
  - establishes a single authoritative source
  - provides feedback mechanisms
  - enforces security
  - gives me a development path
  - is free!
  - and will buy me lunch

Where can we find this?

- Has someone invented this?
- Yes – this is Web 2.0
- Facebook
- Blogs
  - Blogs are a simple content management system.
  - Single item = single content
  - But it can be geo-enabled!
- Start of the Location Management System

Concept

- Replace “post” with “location”
- A single post can be commented on, linked to, found, and updated via the web on multiple platforms.
- Leverage Web 2.0
- Sit back and imagine!
  - Rate your locations
  - Tag
  - Make it searchable

Our platform

- Wordpress
  - Web-based
  - Widely used (100,000+ installs)
  - Easy to install (5-minute installation)
  - Easy to maintain (automatic updates)
  - No development necessary
  - Multi-user compatibility
  - Web 2.0 compatible (feedback, integration)
  - Extensible (plugins)
  - Theme-able
  - FREE!
  - But doesn't buy me lunch

Requirements

- Download Wordpress directly from IIS Web Platform installer
- Configure and create database
- Install

WP-GEO

- The heart of the system
- A simple plugin that geo-enables each post (location)
- Each location has a lat-lon assigned
- LAT-LON = GIS!!

Categories

- Each location can be assigned one or more categories and subcategories
- Every GIS system needs this information to distinguish between location types.

Themes

- Change look and feel of site
- One-click changes
- Extendable, programmable
- We use “Atahualpa” – a fully configurable theme requiring no programming

WP Security roles

- Anonymous – read only
- Subscriber – can create but not publish
- Author – owns their content (trusted)
- Editor – edits any content (sector expert)
- Administrator – site owner
- All of this can be linked to Active Directory
- Can be customized with plugins!

Notifications

- Comments
  - A registered user can suggest changes
  - Suggestions are moderated by the admin
  - An author is notified of suggestions and can respond and update the data.
  - A user can subscribe to other suggestions
- Subscriptions
  - People can subscribe to changes in locations

Creating the LMS

Data Sources

- Existing Services Locator
- County's 211 (services) data
- HSIP Freedom data
- Existing GIS data files (many of them)

- **66,000 unique locations**
- 300+ categories (schools, parks, senior services, fire stations, airports …)

Building the LMS

- Compare all the data
- Remove duplicates
- Determine common information
- Normalize, prepare, and load

Common Information

1. Location Name
2. Categorization (Cat1, Cat2, Cat3)
3. Description of the location, including programs and services offered
4. Geo-location (x, y coordinates) for showing services on maps.
5. Legal owner name of the agency/jurisdiction
6. Location Address.
7. Contact Phone number(s).
8. Service Hours.
9. Email contact information.
10. Web site URL.
11. Additional Information as applicable
12. The External Identification from source system
13. The Source of the Information

LA County LMS

Where we are now

Single source for locations

- Each location has its own URL!
- Can be linked from ANY application
- Can be updated from any application
- The information is always there.

Demonstrations

Questions?